CALIFORNIA FISH AND GAME

Author and Subject Indexes

Volumes 1-20, Inclusive, 1914-1934

Compiled by
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Contribution No. 157, from the California State Fisheries Laboratory

7—35575

EXPLANATORY NOTE

In the author and subject indexes, the titles are listed chronologically and then alphabetically when more than one article by the same author appeared in one year. Unsigned notes and articles are listed under "Anonymous." However, many brief notes of only current interest were omitted. The volume number is in bold-face type, followed by the pagination and illustrations, if any. For the purpose of simplification and to make the subject index useful to all readers, common names are used in preference to scientific nomenclature.

September 5, 1935.

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1933. California flying fish eggs. 19:288–289.

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Hutchinson, W. I.
1933. Destruction of wild life in the Matilija fire. 19:126–128, 2 figs.

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Anonymous.
1924. Help protect California's forest wealth. 10:150–152.

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Storer, Tracy I.
1922. The eastern bullfrog in California. 8:219–224, 2 figs.
1933. Frogs and their commercial use. 19:203–213, 2 figs.

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Bryant, Harold C.
1915. California's fur-bearing mammals. 1:96–107, 2 figs.

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Bryant, Harold C.
1916. California's prehistoric game. 2:82.
Creed, Percy R.
1930. Rambling thoughts of a perverted Britisher. 16:311–314.
Hedderly, Edwin L.
1916. Fish and game conditions in southern California. 2:131–135.
Hutchinson, W. I.
1933. Destruction of wild life in the Matilija fire. 19:126–128, 2 figs.
McAllister, M. Hall.
1919. Game conditions in southern California thirty-five years ago. 5:172–173.
1923. California's large game animals. 9:11–15, 1 fig.
1923. California's large game animals.—Continued. 9:49–50.
Rutledge, A.
1926. No more waste land. 12:169–175.
Toms, Webb.
1922. Fish and game history made and in the making in San Diego County. 8:210–211, 1 fig.
Welch, Walter R.
1931. Game reminiscences of yesteryears. 17:255–263.
Westerfeld, Carl.
1916. Game conditions in Great Britain vs. conditions in California. 2:3–10. 1 fig.

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Hunter, J. S.
1915. Introduced game in New Zealand. 1:41–44.

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Bauder, C. S.
1930. Game conservation in southern California. **16**:211–212.
Bryant, Harold C.
1916. California's prehistoric game. **2**:82.
Bundock, J. L.
1922. A patrolman's views on conservation. **8**:217.
Chase, Henry.
1915. An object lesson in game conservation. **1**:44–49, 1 fig.
Courtright, George W.
1918. Conservation of forests increases game. **4**:74–75.
Dixon, Joseph.
1925. A closed season needed for fisher, marten and wolverine in California. **11**:23–25, 1 fig.
Laws, G. O.
1922. Game conservation in Trinity County. **8**:214–215.
Locke, S. B.
1923. Game refuges and game management on the national forests. **9**:83–86.
Oberholser, Harry C.
1928. A continent-wide waterfowl census. **14**:119–120.
Schaeffle, Ernest.
1914. Some notes on the non-sale of game. **1**:2–3.
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1930. Game refuges, preserves and sanctuaries. **16**:307–311.

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1919. Fish and Game Commission needs plenary powers. **5**:30.
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1915. Recent game legislation. **1**:173–175, 1 fig.
1918. Discretionary powers and game conservation. **4**:129–133.
Carpenter, S. J.
1922. The automobile "concealed weapon." **8**:211–212.
Hoffman, Frank B.
1917. An unfair attitude on game laws. **3**:51–53.
Hunter, J. S.
1917. New game legislation. **3**:100–102.
Moffitt, James.
1931. Some protected birds the duck hunter should know. **17**:412–420, 4 figs.
Newbert, F. M.
1915. Public fishing vs. private hunting. **1**:119–122.
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1919. Federal migratory bird law. **5**:89.
Vogelsang, Charles A.
1915. The equity of the game laws. **1**:148–152.
Welch, Walter R.
1929. Legislation plus education equals conservation. **15**:322–327.
1930. The rights of the amateur sportsman. **16**:107–111.

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Bryant, Harold C.
1925. Quail poisoning experiments. **11**:149–154, 1 fig.
Pierce, C. C., and Clegg, M. T.
1916. The effect of strychnine sulphate on California valley quail. **2**:11–13.
Shaw, Paul A.
1932. Studies on thallium poisoning in game birds. **18**:29–34.
1933. New method developed for thallium determination. **19**:24.
True, Gordon H.
1931. Game birds and citrus fumigation. **17**:53–57, 2 figs.

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1919. Notes on the new game refuges. **5**:33–34.
1920. California's game sanctuaries. **6**:23.

GAME PRESERVES—Continued.

Bryant, Harold C.
1918. Deer licks of the Trinity national forest game refuge. 4:21–25, 5 figs.
1922. California's game refuges. 8:1–34, 31 figs.
Burtch, Lewis A.
1934. The Kern County elk refuge. 20:140–147, 3 figs.
Hoffman, Frank.
1918. A lookout's view of Trinity game refuge. 4:72–74.
Hunter, J. S.
1928. Posting of game refuges. 14:116–117.
Jotter, E. V.
1917. Trinity national forest game refuge. 3:65–68, 2 figs.
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Welch, Walter R.
1930. Game refuges, preserves and sanctuaries. 16:307–311.
1932. The California quail sanctuary and game refuge campaign. 18:24–29, 1 fig.

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Bade, August.
1927. Game bird farming. 13:77–92, 6 figs.
1927. Game propagation. 13:99–102.
1929. Game bird farming in California. 15:53–54.
1932. Artificial methods of propagating game birds. 18:117–131, 12 figs.
Bryant, Harold C.
1926. California's new state game farm. 12:10–13, 4 figs.
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1929. A sportsman visits the Yountville game farm. 15:102–104.
Simpson, 'Gene M.
1927. We must produce if we would destroy. 13:92–96, 3 figs.
Van Roekel, Henry.
1929. Diseases observed in game bird raising. 15:301–308, 7 figs.
Welch, Walter R.
1931. The propagation of California quail in open breeding grounds. 17:421–425, 3 figs.

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McAllister, M. Hall.
1929. Wild goose shooting in California twenty-five years ago. 15:215–218, 2 figs.
Moffitt, James.
1931. The status of the Canada goose in California. 17:20–26, 4 figs.
Neale, George.
1914. Wild geese not a menace to rice crops. 1:29–30.
O'Roke, E. C.
1928. Intestinal parasites of wild ducks and geese. 14:286–296, 2 figs.

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Higgins, Elmer.
1919. Goat fish taken in California. 5:156.

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Walford, Lionel A.
1931. Mexican cabrilla and groupers. 17:17–20, 3 figs.

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Barnhart, P. S.
1918. The spawning of the little-smelt, *Leuresthes tenuis* (Ayres). 4:181–182.
Clark, Frances N.
1926. Conservation of the grunion. 12:161–166, 2 figs.
1928. Grunion at La Jolla. 14:89–90, 2 figs.
1928. Grunion on Cabrillo Beach. 14:273–274, 1 fig.

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1919. Attempt to rear grunion. **5**:156.
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1919. The spawning of the grunion. **5**:201.

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1919. Is the herring gull insectivorous? **5**:71–74, 2 figs.

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Thompson, William F.
1924. The effect of gunfire on fishes. **10**:64–66.

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Anonymous.
1925. North Pacific halibut investigations under the new international treaty. **11**:39–40.
Babcock, John Pease.
1930. Halibut—some facts about the king of the banks. **16**:39–42.
Clark, Frances N.
1930. Review of a report on the migrations of the Pacific halibut (*Hippoglossus hippoglossus*). **16**:318–319.
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1930. California halibut. **16**:315–317, 1 fig.
Phillips, Julius B.
1932. Atavism in a California halibut. **18**:310–312, 1 fig.
Rankin, Edward P.
1915. The halibut fishery of the Pacific coast. **1**:117–119.
Thompson, Ruth Miller.
1928. Progress in halibut investigations. **14**:47–49.
Walford, Lionel A.
1928. Northern halibut in southern California. **14**:89, 1 fig.

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Bryant, Harold C.
1921. California hawks: how to identify them. **7**:133–147, 2 col. pls., 8 figs.

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Croker, Richard S.
1930. Herring on Carquinez Straits. **16**:188.
Jackson, Carl R.
1927. The occurrence of the Japanese herring. **13**:141.
Scofield, Norman B.
1918. The herring and the development of the herring industry in California. **4**:65–70, 6 figs.
Starks, Edwin Chapin.
1918. The herrings and herring-like fishes of California. **4**:58–65, 9 figs.
Thompson, William F.
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Betten, H. L.
1931. Field trials in California. **17**:129–135, 5 figs.
Bruce, Jay.
1922. The why and how of mountain lion hunting in California. **8**:108–114, 4 figs.
Bryant, Harold C.
1917. Mountain lion hunting in California. **3**:160–164, 4 figs.
Bullard, F. A.
1922. Careless deer hunting. **8**:208–209, 1 fig.

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Hagen, Roy M.
1922. The cattleman's rights. **8**:177–179.
Holman, John P.
1925. Game, hunter, and landowner. **11**:56–57.
Kroeber, A. L.
1915. A California Indian hunting legend. **1**:52–59, 2 figs.
McAllister, M. Hall.
1929. Wild goose shooting in California twenty-five years ago. **15**:215–218, 2 figs.
McGaffey, Ernest.
1932. Southern California dove shooting. **18**:1–4.
Moffitt, James.
1926. Suggested dates of open season on deer in California. **12**:124–127, 2 figs.
Newsome, J. E.
1926. Hunting with animal blinds in Merced County. **12**:20–22, 1 fig.
Pope, Saxton.
1918. Hunting with bow and arrow. **4**:183–185, 2 figs.
1919. Bear hunting with bows and arrows. **5**:69–70, 1 fig.
Revere, Joseph Warren.
1922. A pioneer elk hunt. **8**:35–37.
Richards, W. W.
1932. Fifty years ago on the Suisun marsh. **18**:47.
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1927. Hunting and fishing reminiscences. **13**:180–184, 1 fig.
1928. Quail shooting in California today and fifty years ago. **14**:122–128, 1 fig.
Wilson, Leo K.
1933. The management of duck marshes. **19**:15–20, 1 fig.
Winch, Frank.
1922. Posted property and a solution of the hunting problem. **8**:179–181.

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Skogsberg, Tage.
1930. Hydrobiological survey of the Hopkins Marine Station. **16**:35–39.

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1925. North Pacific halibut investigations under the new international treaty. **11**:39–40.

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Bauder, C. S.
1920. Kamaboko being manufactured at San Pedro. **6**:82.

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Anonymous.
1918. Kelp and potash manufacture. **4**:149–150.
1919. Tide conditions injure fisheries. **5**:39–40.
Crandall, W. C.
1918. A review of the kelp industry. **4**:105–107, 1 fig.
Phillips, Julius B.
1932. Giant kelp utilized at Monterey. **18**:43–46, 2 figs.

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Porteous, Edward.
1918. The growth of kelp. **4**:108–112, 2 figs.
Scofield, Norman B.
1916. Will cutting the kelp injure the fisheries? **2**:129–131.

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Clark, Frances N.
1930. Proportions of king and queen fish in the San Pedro wholesale fish markets. **16**:187–188.

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1918. The herrings and herring-like fishes of California. **4**:58–65, 9 figs.
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1919. Young of the ladyfish discovered. **5**:158.

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Coleman, George A.
1925. A biological and physiographic survey of California lakes and streams. **11**:17–23, 3 figs.
1925. Biological survey of the Rae Lakes region. **11**:57–62, 5 figs.
1930. Biological survey of the lakes, reservoirs and streams of San Diego County. **16**:111–118.

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Anonymous.
1925. Dollar-a-year deputies. **11**:171–172.
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1915. Wardens and warden work. **1**:108–114.
Sanders, Joseph H.
1922. The deputy of the Fish and Game Commission. **8**:225–226.
Schaeffle, Ernest.
1915. The administration of fish and game laws. **1**:209–212.
1916. The need of co-operation in fish and game preservation. **2**:77–79.
Welch, Walter R.
1927. Dollar-a-year wardens. **13**:96–98.
1927. Poachers and game law violators. **13**:264–268.
1928. Volunteer deputies. **14**:117–119.
1930. California fish and game wardens today and yesteryear. **16**:204–210, 3 figs.

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1925. The hunting and angling license increase. **11**:119.
1930. The proposed tourist angler's license. **16**:245–246.
Neale, George.
1925. Why increase the cost of hunting and angling licenses, and some history thereof. **11**:72–73.
Schaeffle, Ernest.
1915. The new angler's license. **1**:59–62.
Warner, O. L.
1934. New angling and hunting license buttons. **20**:152.

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Bruce, Jay.
1922. The why and how of mountain lion hunting in California. **8**:108–114, 4 figs.
1925. The problem of mountain lion control in California. **11**:1–17, 5 figs.
Bryant, Harold C.
1917. Mountain lion hunting in California. **3**:160–164, 4 figs.

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1921. The control of the mountain lion in California. 7:99–101, 1 fig.
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1931. Crabs and spiny lobsters. 17:495–496.
1931. Lobster quite a traveler. 17:305–306.
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1919. Notes on the artificial propagation of the spiny lobster. 5:70–71.
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1919. Spiny lobster larvae. 5:156.
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1926. A spiny lobster season at San Diego. 12:75–76.
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1932. Monterey Spanish mackerel landed in Monterey. 18:99.
Starks, Edwin Chapin.
1918. The mackerel and mackerel-like fishes of California. 4:118–129, 12 figs.
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1919. The recurrence of the frigate mackerel. 5:200.

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1930. The French mackerel fishery. 16:217–221, 1 map.
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1918. Important provisions of the migratory bird treaty act. 4:187.
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1918. What is expected from the new federal law. 4:188.

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1934. A preliminary survey of Mission Bay State Park. 20:1–13, 3 figs.

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1928. Mosquito fish a success. **14:67.**
Hubbs, Carl L.
1919. The stickleback: a fish eminently fitted by nature as a mosquito destroyer. **5:21–24.**
Kennedy, Clarence Hamilton.
1916. A possible enemy of the mosquito. **2:179–182, 3 figs.**
Neale, George.
1916. Black bass eat mosquitoes. **2:50.**
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1915. Fish and the mosquito problem. **1:230–231.**

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Thompson, William F., and Bryant, Harold C.
1920. The mullet fisheries of Salton Sea. **6:60–63, 3 figs.**

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1931. Permanent quarantine on clams and mussels. **17:446–447.**
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1928. Mussel poisoning in California. **14:201–202, 1 fig.**
Rankin, Edward P.
1918. The mussels of the Pacific coast. **4:113–117, 4 figs.**

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1930. Conservation through contact with living things. **16:299–307, 4 figs.**
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1917. Scientific nature study in the public schools. **3:14–16.**
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1915. The meaning of nature study. **1:216–219.**

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1915. The Tennessee possum has arrived in California. **1:114–116, 1 fig.**

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1931. Oyster culture in California. **17:246–251, 5 figs.**
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1932. Oyster growing in California. 18:63–64.

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1928. The relation of parasitism to wild life conservation. 14:128–129.

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1932. The white pelican. 18:339–341, 3 figs.
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1933. In defense of pelicans. 19:188–192.

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1930. Salt-water perch in the San Pedro wholesale fish markets. 16:139–143, 4 figs., 1 table.
Neale, George.
1931. Sacramento perch. 17:409–411, 3 figs.
1931. The spiny-rayed game fishes of the California inland waters. 17:1–17, 11 pls. (6 col.), 9 figs.
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1931. Early history of introduction and distribution of spiny-rayed fishes in California waters. 17:238–240.

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1931. Has the pheasant a credit balance with the farmer? 17:162–164, 1 fig.

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1923. The band-tailed pigeon in Yosemite. 9:99–100.
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1924. The present status of the band-tailed pigeon on the Pacific coast. 10:1–9.

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1919. A case of destruction of Pismo clams by oil. 5:174–175, 1 fig.

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1918. The mackerel and mackerel-like fishes of California. 4:118–129, 12 figs.

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1934. Porcupine control on forests of California. 20:148–150, 2 figs.

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1931. Prawn fishery started at Monterey. 17:159–162. 2 figs.

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1918. The dangers of the bounty system. 4:189–190.
1926. Destruction of predatory birds. 12:137–139.
Hall, E. Raymond.
1931. The coyote and his control. 17:283–290, 2 figs.
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1921. The control of the mountain lion in California. 7:99–101, 1 fig.
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1931. Ground squirrel control in California. 17:241–246.
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1934. Predatory animal studies. 20:30–36.
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1933. Some facts about predatory animal control. 19:1–9, 2 figs.
Sumner, E. L., Jr.
1931. Some notes on the birds and animals of the Los Banos duck refuge with special reference to predatory species. 17:270–280, 11 figs.

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1925. Quail poisoning experiments. 11:149–154, 1 fig.
Burghduff, A. E.
1934. Division imports quail from Mexico. 20:166–167.
Neale, George.
1915. The California valley quail and introduced game birds. 1:153–155.
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1916. The effect of strychnine sulphate on California valley quail. 2:11–13.
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1933. More about the quail refuges. 19:248–252, 3 figs.
1933. The quail replenishment program. 19:20–24, 2 figs.
1934. An experiment in quail importation. 20:365–370, 2 figs.
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1919. Importation of quail from Mexico. 5:88–89.
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1931. The propagation of California quail in open breeding grounds. 17:421–425, 3 figs.
1932. The California quail sanctuary and game refuge campaign. 18:24–29, 1 fig.

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Hobmaier, Adele.
1932. The life-history and the control of the crop-worm, *Capillaria contorta*, in quail. **18**:290–296, 3 figs.
O'Roke, E. C.
1928. Parasites and parasitic disease in the California valley quail. **14**:193–198, 4 figs.
1932. Parasitism of the California valley quail by *Haemoproteus lophortyx*, a protozoan blood parasite. **18**:223–238, 2 pls., 5 figs.

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Clark, Frances N.
1930. Proportions of king and queen fish in the San Pedro wholesale fish markets. **16**:187–188.

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1919. Parasites which affect the food value of rabbits. **5**:142–143, 1 fig.
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1924. The Sierra white-tailed jackrabbit. **10**:172–175.

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Coleman, George A.
1925. Biological survey of the Rae Lakes region. **11**:57–62, 5 figs.

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1918. The skates and rays of California, with an account of the rat fish. **4**:1–15, 18 figs.

RAYS

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Walford, Lionel A.
1933. Commercial uses of sharks and rays. **19**:179–188, 7 figs.

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Phillips, Julius B.
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1920. The life history of the sage hen. **6**:12–14.

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Clark, G. Houghton.
1930. Salmon spawning in drainage canals in the San Joaquin Valley. **16**:270.
Rich, Willis H.
1921. An instance of adult, sea-run chinook salmon found feeding in fresh water. **7**:7–8, **1** fig.
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1928. Humpback salmon taken off Santa Monica. **14**:90–91.

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Rich, Willis H.
1921. The relative maturity of the chinook salmon taken in the ocean along the Pacific coast. 7:12–22, 5 figs.

Snyder, John O.
1922. The return of marked king salmon grilse. 8:102–107, 11 figs.
1923. A second report on the return of king salmon marked in 1919, in Klshoo Klamath River. 9:1–9, 5 figs.
1924. A third report on the return of king salmon marked in 1919 in Klamath River. 10:110–114, 2 figs.

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McGregor, E. A.
1922. Observations on the egg yield of Klamath River king salmon. 8:160–164, 2 figs, 2 tables.
1923. Notes on the egg yield of Sacramento River king salmon. 9:134–138, 1 fig., 1 table.

Snyder, John O.
1921. How many eggs does a salmon lay? 7:63–64.

SALMON—MARKING

Scofield, W. L.
1920. King salmon marking experiment at Klamath River, 1919. 6:101–104.
1921. Sacramento River salmon marking, 1920. 7:125–126.

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1924. An experiment relating to the homing instinct of king salmon. 10:9–17, 7 figs.

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1921. The relative maturity of the chinook salmon taken in the ocean along the Pacific coast. 7:12–22, 5 figs.

SALMON—MIGRATION

McGregor, E. A.
1922. Migrating salmon at the Redding Dam. 8:141–154, 6 figs.

Snyder, John O.
1921. Three California marked salmon recovered. 7:1–6, 4 figs.
1922. The return of marked king salmon grilse. 8:102–107, 11 figs.
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1924. Young salmon taken at sea. 10:62–64, 1 fig.

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Scofield, Norman B.
1918. The quinnat salmon in New Zealand. 4:16–17.

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Scofield, W. L.
1925. Mild curing salmon in California. 11:62–68.

SALMON—RACIAL VARIATIONS

McGregor, E. A.
1923. A possible separation of the river races of king salmon in ocean-caught fish by means of anatomical characters. 9:138–150, 3 figs., 10 tables.

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Anonymous.
1921. Salmon in the Eel River. 7:52–53.
1921. San Joaquin River salmon. 7:51–52.

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Bryant, Harold C.
1923. Salmon fishcultural operations on the Klamath River. 9:19–23, 5 figs.
Scofield, Norman B.
1918. The quinnat salmon in New Zealand. 4:16–17.
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1934. Plant silver salmon in Eagle Lake. 20:389–390, 1 fig.

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1919. The salmon of the Sacramento need more protection. 5:196–197.
1921. Eel River problems. 7:58.
1921. Salmon conservation and salmon trolling. 7:55–58, 1 fig.
Clark, G. Houghton.
1929. Sacramento River salmon fishery. 15:1–10, 4 figs.
Scofield, Norman B.
1929. The status of salmon in California. 15:13–18.
Scofield, W. L.
1920. Silver salmon at Monterey in 1920. 6:175.
1921. Gear used for salmon trolling in California in 1920. 7:22–38, 7 figs.
Snyder, John O.
1924. Indian methods of fishing on Trinity River and some notes on the king salmon of that stream. 10:163–172, 6 figs.

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Anonymous.
1929. Striped bass to be planted in Salton Sea. 15:254–255.
1930. Salton Sea bass. 16:338.
1930. Striped bass introduced in Salton Sea. 16:51.
Coleman, George A.
1929. A biological survey of Salton Sea. 15:218–227, 5 figs.
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1920. Investigation of the Salton Sea. 6:83–84.
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1920. The mullet fisheries of Salton Sea. 6:60–63, 3 figs.

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Moffitt, James.
1934. Sand-grouse liberated in California. 20:292–295, 1 fig.

SARDINE. *See* Sardines.

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Anonymous.
1919. Locating sardines by aeroplane. 5:41.
California State Fisheries Laboratory.
1934. The 1934-1935 sardine season. 20:298–300.
Clark, Frances N.
1933. Changing abundance of the California sardine, measured by length of scouting time. 19:136–141, 6 figs.
Clark, G. Houghton.
1932. Relative destructiveness of sardine circle nets in southern California. 18:219–222.
Godsil, Harry C.
1931. The relative efficiency of the semipurse seine compared with the round haul net. 17:52–53.
Greene, B. D. Marx.
1927. An historical review of the legal aspects of the use of food fish for reduction purposes. 13:1–17, 2 figs.
1928. An historical review of the legal aspects of the use of food fish for reduction purposes. (Continued.) 14:42–44.
Higgins, Elmer.
1923. Sardines abundant now—but what of the future? 9:50–51.
Higgins, Elmer, and Holmes, Harlan B.
1921. Methods of sardine fishing in southern California. 7:219–237, 16 figs.
Lindner, Milton J.
1930. Luminescent fishing. 16:237–240, 2 figs.

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Phillips, Julius B.
1930. Change in fishing for Monterey sardines. **16**:269–270.
1932. Improvements in sardine fishing gear in the Monterey region (1930-1932). **18**:328–331, 3 figs.
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1934. Changes in sardine fishing gear in the Monterey region, with a note on expansion of fishing grounds. **20**:134–139, 3 figs.
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1928. Why California sardines are caught at night rather than by day. **14**:250.
1934. Notes on the sardine fishery. **20**:158–162.
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1926. Purse seines for California sardines. **12**:16–19.
1928. Sardine seasons at Monterey and Los Angeles Harbor. **14**:198–200, 2 figs.
1934. The catch of sardines in California. **20**:300–303, 5 tables.
Thompson, William F.
1921. The future of the sardine. **7**:38–41, 1 fig.
1921. Historical review of California sardine industry. **7**:195–206, 7 figs.
1921. Quarter-oils or half-pound ovals. **7**:106–110.

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1934. The 1934–1935 sardine season. **20**:298–300.
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1934. Notes on the sardine fishery. **20**:158–162.

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1920. The inauguration of scientific work on the sardine. **6**:32.
Lindner, Milton J.
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Thompson, Ruth Miller.
1927. California sardine investigations. Being a review of Fish Bulletin 11, "The California Sardine." **13**:143–145.
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Clark, Frances N.
1933. Changing abundance of the California sardine, measured by length of scouting time. **19**:136–141, 6 figs.
Higgins, Elmer.
1923. Sardines abundant now—but what of the future? **9**:50–51.
Scofield, Norman B.
1928. Sardine scarcity at Monterey. **14**:83–84.
Scofield, W. L.
1930. Scarcity of small sardines. **16**:75.
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1921. Whales and sardines. **7**:110–111.

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1929. First discovery of sardine eggs. **15**:248–249.
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1930. Preliminary report of the early life history of the California sardine. (A contribution from the Hydrobiological Survey). **16**:120–124, 4 figs.

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1919. The breeding season of the sardine. **5**:159.

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Beard, Harry R.
1921. California sardine food products and their preparation. **7**:238–247, 6 figs.
Whitehead, Seward S.
1927. Keeping small sardines firm by refrigeration. **13**:217.

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Clark, Frances N.
1930. Size at first maturity of the white sea bass (*Cynoscion nobilis*). **16**:319–323, 3 figs.
Croker, Richard S.
1932. The white sea-bass and related species that are sold in California fish markets. **18**:318–327, 8 figs.
Higgins, Elmer.
1920. The young of black sea-bass. **6**:5–6, 2 figs.

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Bonnot, Paul.
1928. The sea lions of California. **14**:1–16, 10 figs.
1930. Some notes on the food of seals and sea lions. **16**:191.
1931. The California sea lion census for 1930. **17**:150–155, 5 figs.
1932. Catching sea lions on the Lower California coast. **18**:67–68.
Starks, Edwin Chapin.
1921. Notes on the sea lions. **7**:250–253, 4 figs.

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1916. Habits and hunting of the sea otter. **2**:79–82.

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1933. Food of seals. **19**:282–284.
Starks, Edwin Chapin.
1922. Records of the capture of fur seals on land in California. **8**:155–160, 3 figs.

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Anonymous.
1916. Shad spawn to be furnished eastern states. **2**:101.
Jordan, David Starr.
1916. The first shad taken in the Columbia. **2**:152.
Nidever, H. B.
1916. Shad in California. **2**:59–64, 6 figs.
Starks, Edwin Chapin.
1918. The herrings and herring-like fishes of California. **4**:58–65, 9 figs.

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1920. Sleeper shark captured. **6**:80.
1931. Basking shark grows large. **17**:306.
Bonnot, Paul.
1929. Some notes on the basking shark (*Cetorhinus maximus*). **15**:175–176.
Chute, George Roger.
1930. The lily iron returns to Monterey Bay. Shark fishing recommences on a harpoon basis. **16**:143–152, 1 fig.

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1920. The growth of the swell shark within the egg case. 6:153–157, 4 figs.
MacGinitie, G. E.
1931. Basking sharks on the Pacific coast. 17:445–446.
Starks, Edwin Chapin.
1917. The sharks of California. 3:145–153, 13 figs.
Thompson, William F.
1921. The basking shark at Monterey. 7:178.
Walford, Lionel A.
1933. Commercial uses of sharks and rays. 19:179–188, 7 figs.

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Gardner, Leon L.
1918. Bighorn sheep in the vicinity of Claremont, California. 4:17–21, 1 fig.
Miller, Loye.
1927. The mountain sheep in the San Jacinto region. 13:67–68.
Ober, E. H.
1931. The mountain sheep of California. 17:27–39, 6 figs.

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Fry, Donald H., Jr.
1933. Operation of a California shrimp trawl. 19:264–267, 4 figs.
Scofield, Norman B.
1919. Shrimp fisheries of California. 5:1–12, 5 figs.

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1918. The skates and rays of California, with an account of the rat fish. 4:1–15, 18 figs.

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Sumner, E. L., Jr.
1932. An outline of the habits of the striped skunk and little spotted skunk with some directions for trapping. 18:34–43.

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Clark, Frances N.
1928. The smelts of the San Pedro wholesale fish markets. 14:16–21, 4 figs., 2 tables.
1934. The life history of the bay smelt. 20:157–158.
Phillips, Julius B.
1932. Circle gill netting for smelt. 18:149–155, 6 figs.

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Bandini, Ralph.
1933. The saga of big game fishing. 19:173–178.
1933. Swordfishing. 19:241–248, 4 figs.
Boutan, C. M.
1917. Striped bass fishing. 3:53–54.
Cole, Charles E.
1930. Angling for striped bass. 16:286–293, 5 figs.
Croker, Richard S.
1931. Sport fishing in southern California. 17:339–340.
French, Dwight G.
1916. Fishing at Santa Catalina Island—its development and methods. 2:14–19, 1 fig.
Fry, Donald H., Jr.
1932. Barge fishing, a southern California sport. 18:244–249, 4 figs.
Holder, Charles Frederick.
1914. Attempts to protect the sea fisheries of southern California. 1:9–19.
Hubback, C. E.
1927. Striped bass as I know them. 13:25–27.
Kauffman, Earl R.
1930. Black bass fishing tackle—using the right tackle is more than half of angling pleasure. 16:293–296.
1931. Trouting. 17:146–150.

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Lincoln, Robert Page.
1919. Summer on the California trout streams. 5:136–141.
Ludlum, Roy E.
1922. Fishin'. In some lakes near Mount Lassen, principally, and trout, generally. 8:197–200, 2 figs.
M., R. L.
1919. Some notes on dry-fly fishing. 5:169–170.
1920. Notes on dry-fly fishing. No. 2. 6:1–5.
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Moor, Edward N.
1932. Fifty-five years ago on the McCloud River. 18:132–135.
Phillips, Julius B.
1932. Unusually good fishing in and off Monterey Bay. 18:21–24, 1 fig.
Powell, Tod.
1932. Sportive tackle for sportive steelheads. 18:312–318, 3 figs.
Roberts, D. E.
1922. Trout conservation. 8:212–213, 1 fig.
Sadler, R. J.
1928. Fishing off southern beaches growing in popularity. 14:250.
Van Deventer, William C.
1926. Barge fishing on the southern California coast. 12:19–20.
Welch, Walter R.
1927. Hunting and fishing reminiscences. 13:180–184, 1 fig.
1929. Trout fishing in California today and fifty years ago. 15:18–23, 3 figs.

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SQUID

Classic, Ralph F.
1929. Monterey squid fishery. 15:317–320, 4 figs.
Croker, Richard S.
1934. Giant squid taken at Laguna Beach. 20:297.
Heath, Harold.
1917. Devilfish and squid. 3:103–108, 4 figs.
Phillips, Julius B.
1933. Description of a giant squid taken at Monterey, with notes on other squid taken off the California coast. 19:128–136, 3 figs. (Correction, 19:217.)
Scofield, W. L.
1924. Squid at Monterey. 10:176–182, 4 figs.

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Jacobsen, W. C.
1931. Ground squirrel control in California. 17:241–246.
Pierce, C. C., and Clegg, M. T.
1916. The effect of strychnine sulphate on California valley quail. 2:11–13.

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STEELHEADS. *See* Trout, Steelhead.

STICKLEBACKS

Hubbs, Carl L.
1919. The stickleback: a fish eminently fitted by nature as a mosquito destroyer. 5:21–24.

STREAMS

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1927. Commission given power to close streams to fishing. 13:192–193.
Burghduff, A. E.
1934. Stream improvement. 20:113–118, 4 figs.
Coleman, George A.
1925. A biological and physiographic survey of California lakes and streams. 11:17–23, 3 figs.
1930. Biological survey of the lakes, reservoirs and streams of San Diego County. 16:111–118.

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Needham, Paul R.
1934. Notes on stream survey work in California. **20**:295–296.

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Anonymous.
1919. Striped bass taken in Mission Bay, San Diego County, California. **5**:197.
1922. Striped bass decreasing. **8**:238.
1929. Striped bass to be planted in Salton Sea. **15**:254–255.
1930. Salton Sea bass. **16**:338.
1930. Striped bass introduced in Salton Sea. **16**:51.
1932. Striped bass in Newport Bay. **18**:57–58, 1 fig.
Boutan, C. M.
1917. Striped bass fishing. **3**:53–54.
Clark, G. Houghton.
1932. The striped bass supply, past and present. **18**:297–298, 1 fig.
1934. Tagging of striped bass. **20**:14–19, 3 tables.
Cole, Charles E.
1930. Angling for striped bass. **16**:286–293, 5 figs.
Hubback, C. E.
1927. Striped bass as I know them. **13**:25–27.
Scofield, Norman B., and Bryant, Harold C.
1926. The striped bass in California. **12**:55–74, 5 figs.
Walford, Lionel A.
1932. Big-eyed bass and striped bass. **18**:262–263, 2 figs.

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Scofield, Eugene C.
1932. A simple method of age determination of striped bass. **18**:168–170. 1 fig.

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1928. Striped bass studies. **14**:29–37, 4 figs.
Scofield, Norman B., and Bryant, Harold C.
1926. The striped bass in California. **12**:55–74, 5 figs.

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Craig, Joseph A.
1928. The striped bass supply of California. **14**:265–272, 3 figs.
Scofield, Norman B., and Bryant, Harold C.
1926. The striped bass in California. **12**:55–74, 5 figs.

STURGEON

Green, W. J.
1926. Sturgeon on increase. **12**:108–109.

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Neale, George.
1931. The spiny-rayed game fishes of the California inland waters. **17**:1–17, 11 pls. (6 col.), 9 figs.
Scofield, Norman B.
1916. Calico bass, sharp-eared bass, and bluegill sunfish. **2**:210.
Vogelsang, Charles A.
1931. Early history of introduction and distribution of spiny-rayed fishes in California waters. **17**:238–240.

SWORDFISHES

Bandini, Ralph.
1933. Swordfishing. **19**:241–248, 4 figs.
Maddox, Coburn F.
1927. Bagging broadbills in California waters. **13**:259–261, 1 fig.
Starks, Edwin Chapin.
1918. The mackerel and mackerel-like fishes of California. **4**:118–129, 12 figs.

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TAHOE, LAKE

Coleman, George A.
1926. Conditions of existence of fish in Lake Tahoe and tributary streams. 12:23–27.
1927. Fishing conditions in Lake Tahoe. 13:261–264.
1929. A biological survey of Lake Tahoe. 15:99–102, 1 fig.
Shebley, W. H.
1929. History of the fish and fishing conditions of Lake Tahoe. 15:193–203, 6 figs.

TAI

Walford, Lionel A.
1930. Tai and carp. 16:234–237, 4 figs.

TOTUAVA

Anonymous.
1930. Transporting totuava by trains. 16:186.
Chute, George Roger.
1928. The totuava fishery of the California Gulf. Trans-desert trucking of Mexican-caught fish. 14:275–281, 8 figs.
1930. Seen kow, a regal soup-stock. 16:23–35, 11 figs.
Craig, Joseph A.
1926. A new fishery in Mexico. 12:166–169, 1 fig.
Croker, Richard S.
1932. The white sea-bass and related species that are sold in California fish markets. 18:318–327, 8 figs.

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Meyer, K. F.
1928. Mussel poisoning in California. 14:201–202, 1 fig.
Pierce, C. C., and Clegg, M. T.
1916. The effect of strychnine sulphate on California valley quail. 2:11–13.
Shaw, Paul A.
1932. Studies on thallium poisoning in game birds. 18:29–34.
1933. New method developed for thallium determination. 19:24.
True, Gordon H., Jr.
1931. Game birds and citrus fumigation. 17:53–57, 2 figs.

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Sumner, E. L., Jr.
1931. An outline of the habits of the bobcat with some directions for trapping. 17:251–254, 1 fig.
1932. An outline of the habits of the striped skunk and little spotted skunk with some directions for trapping. 18:34–43.

TRAWLS. *See* Fishing Methods and Gear.

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Anonymous.
1926. A rare trout from Lower California. 12:89.
Croker, Richard S.
1931. A pug-headed rainbow trout. 17:488–489, 1 fig.
Ellis, S. L. N., and Bryant, Harold C.
1920. Distribution of the golden trout in California. 6:141–152, 2 figs.
Evermann, Barton Warren, and Bryant, Harold C.
1919. California trout. 5:105–135, 4 col. pls., 12 figs.
Lincoln, Robert Page.
1919. Summer on the California trout streams. 5:136–141.
Snyder, John O.
1921. A royal silver trout caught in Lake Tahoe. 7:148–149.
1923. The identification of trout. 9:10–11, 1 fig.
1928. California trout. 14:121–122.
1933. California trout, 19:81–112, 4 col. pls., 15 figs.
1934. A new California trout. 20:105–112, 1 col. pl., 4 figs.

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Welch, Walter R.
1929. Trout fishing in California today and fifty years ago. **15**:18–23, 3 figs.

TROUT—DISEASES

Van Roekel, H.
1929. Acetic acid as a control agent for cyclochaete and gyrodactylus in hatchery trout. **15**:230–234, 2 figs.

TROUT—FOOD

Coleman, George A.
1929. The food of trout. **15**:39–41.
1930. Results of feeding experiments with trout fry. **16**:1–8.
Howe, Helen Y., and Meigs, Avis.
1927. Food habits of trout. **13**:148–149.
Needham, Paul R.
1934. Notes on the food of trout. **20**:119–127, 8 figs.

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Brownlow, O. P.
1929. Golden trout planting during 1928. **15**:23–28, 6 figs.
Coleman, George A.
1928. Biological requisites for lake trout. **14**:45–47.
Evermann, Barton Warren, and Bryant, Harold C.
1919. California trout. **5**:105–135, 4 col. pls., 12 figs.
Fisher, John P.
1915. Some precautions in the planting of trout. **1**:220–221, 1 fig.
Muehleisen, A.
1929. An experiment in restocking a bass lake with trout. **15**:314–316, 3 figs.
Needham, Paul R.
1933. The California trout investigations. **19**:113–122, 9 figs.
1934. Notes on the California trout investigations. **20**:153.
Van Roekel, H.
1929. Acetic acid as a control agent for cyclochaete and gyrodactylus in hatchery trout. **15**:230–234, 2 figs.

TROUT, STEELHEAD

Anonymous.
1921. The steelhead, a distinct species. **7**:114.
Snyder, John O.
1921. Steelheads caught at sea off the coast near Fort Bragg. **7**:9–11, 2 figs.
1925. The half-pounder of Eel River, a steelhead trout. **11**:49–55, 3 figs.
1933. A steelhead migration in Shasta River. **19**:252–254, 1 fig.
Taft, A. C.
1933. California steelhead trout problems. **19**:192–199, 2 figs.

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Ellis, S. L. N.
1922. Bits of history of Tulare Lake fishing. **8**:206–208, 1 fig.

TUNA. *See also* Albacore, Bonito.

Fry, Donald H., Jr.
1932. Cooking and cleaning losses in canning tuna. **18**:165–168.
Starks, Edwin Chapin.
1918. The mackerel and mackerel-like fishes of California. **4**:118–129, 12 figs.
Thompson, Ruth Miller.
1927. Wanted: Hooks found in albacore and tunas. **13**:141.

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Anonymous.
1920. The status of the tuna. 6:172–173.
1920. Tuna fisheries investigated. 6:173–174.
Maddox, Coburn F.
1929. San Diego tuna industry. 15:34–39, 2 figs.
1932. The cruise of the "*Mayflower*." 18:251–253, 1 fig.
Scofield, W. L.
1933. Tuna by railway from Mexico. 19:220.
Thompson, William F.
1919. Blue-fin and yellow-fin tuna. 5:201–202.
Van Vorhis, L. G.
1934. Bluefin tuna. 20:394.
Whitehead, Seward S.
1930. California bluefin tuna. 16:231–233, 4 figs.

U

U. S. BUREAU OF FISHERIES PRESERVATION LABORATORY

Anonymous.
1920. United States Bureau of Fisheries, San Pedro laboratory. 6:174.
1922. Work of the California laboratory of the Bureau of Fisheries. 8:133.

W

WHALES

Anonymous.
1919. Sperm whale taken off Monterey. 5:41.
1929. Whales commercially extinct on California coast. 15:337–338.
Bonnot, Paul.
1929. The whales of California. 15:203–215, 10 figs.
1931. Killer whale in Carquinez Straits. 17:490–491, 1 fig.
Fry, Donald H., Jr.
1933. Rare whale taken at San Pedro. 19:158.
Scofield, Norman B.
1925. The killer. 11:86–87.

WHITEBAIT

Bonnot, Paul.
1930. The California whitebait fishery. 16:130–136, 5 figs.

WOLF-FISHES

Bonnot, Paul.
1930. Wolf fish found on Humboldt Bay beach. 16:370.
Phillips, Julius B.
1930. Wolf fish captured at Monterey. 16:267–268, 1 fig.
1931. Another wolf fish taken at Monterey. 17:85–86.
1932. Wolf-fish taken at Monterey. 18:99.
Selle, Wilbur.
1925. Wolf fish taken at Pacific Grove. 11:188–189.

WOLVERINES

Dixon, Joseph.
1925. A closed season needed for fisher, marten and wolverine in California. 11:23–25, 1 fig.
Fry, Walter.
1923. The wolverine. 9:129–134.

WOLVES

Dixon, Joseph.
1916. The timber wolf in California. 2:125–129, 3 figs.

Y

YELLOWTAIL

Starks, Edwin Chapin.
1918. The mackerel and mackerel-like fishes of California. 4:118–129, 12 figs.
Whitehead, Seward S.
1933. Condition of the yellowtail fisheries. 19:199–203, 2 figs.

O

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1933–ABSTRACT CALIFORNIA SPORTING FISH & GAME LAWS–1935

THIS ABSTRACT WILL BE VALID UNTIL 90 DAYS AFTER ADJOURNMENT OF THE 1935 LEGISLATIVE SESSION

OPEN AND CLOSED SEASONS

WHITE SQUARES INDICATE OPEN SEASON. NUMBERS IN SQUARES ARE OPEN DATES

GAME

	DISTRICTS	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	BAG AND POSSESSION LIMITS, ETC.
DEER	1½										15			No Does, Fawns or Spike Bucks No Forked Horned Deer in Dist. 1¾ No sale of Venison or Deer Skins Two Bucks per Season except in 1¾ where limit is one See Notes 6-9-10-12
	2-2½-3									14				
	2¼-4-4¼								16	15				
	1-1¾-4½-23-25									16	15			
Rabbits—Cottontail and Brush	ALL EXCEPT 4, 4¾, 19, 21											15	15	15 per day. 30 per week. Season always open in 4, 4¾, 19, 21
Bear, Fur Animals	ALL												16	See Note 7
Ducks, Geese, Jack Snipe, Mud Hens	ALL — FEDERAL LAW	See Note →												Federal regulations will be enforced in California and will be published as soon as announced by Federal authorities.
	ALL — STATE LAW	15												15 Ducks daily, 30 weekly, pintail limit, 25 Snipe daily, possession limit, twice 1 day limit, see note 1. See notes 9 to 13, inc.
Quail—Valley, Desert and Mountain	ALL EXCEPT 1½											15		Valley - Desert - Mountain Each Variety 10 per day. 10 in possession. 20 per week
	1½													
Dove	ALL EXCEPT 4-4½-4¾													15 Per Day 15 in possession 30 Per Week
	4-4½-4¾													
Pheasant												19 20		2 Male birds per day 2 in possession
Pigeon													15	10 per day 10 in possession 20 per week

There is no open season on Elk, Antelope, Mountain Sheep, Sea Otter, Beaver, Tree Squirrel, Sierra Hare, Rail, Wood Duck, Swan, Shore Birds (except Jack Snipe), Grouse, Sage Hen, Imported Quail, Partridge, or Wild Turkey

FISH

	DISTRICTS	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	BAG AND POSSESSION LIMITS, ETC.
Steelhead and all Trout (except Golden)	1-1½-1¾-2-2¼-3-4-4½-4¾-15 Klamath River, Lake Almanor													Bag limit for taking and possession, 25 trout or 10 pounds and one trout.
	2½		28			30								
	23-25					10								
	Truckee River					15								
Whitefish	See Note 22													
Unlawful to take trout in waters closed by Governor's proclamation	1½-5 and Winter Klamath River		28											5 Trout regardless of weight
	Russian, Napa, Navarro, Eel in 2, 2½, 12a, Tidewater 2-1-15		28											3 Trout regardless of weight
	Sacramento River between Vina Ferry and Middle Creek, Shasta County													3 Trout regardless of weight
Golden Trout	ALL EXCEPT 1-4½													20 per day. None under 5 inches Not more than 10 lbs. and one See Note 22
	1-4½ Inyo (at Intrawed Lake) group													
BLACK BASS	ALL EXCEPT 4¾						29							15 per day No Closed Season on 4¾
	CLEAR LAKE													Clear Lake 10 per day
Sunfish	ALL						29							25 per day
Sacramento Perch and Crappie	ALL EXCEPT CLEAR LAKE						29							25 per day
	CLEAR LAKE													10 per day
Striped Bass	ALL													Feather River from mouth to Oroville, closed January 1st to April 30th. Those under 12 inches, 5 per day. 5 on possession. None to be taken from Suisun Sea. See Notes 19 and 28.
Crabs	ALL EXCEPT 1½-6-7-8-9									30			15	Season Districts 1½-6-7-8-9 December 15 to August 30 See Note 23, None under 7 inches. No Female
Abalones		14			16									Only for food. Must be brought to shore alive or shell Angling License Required. See Note 26
Pismo Clams	17													None under 5 inches. No shipment. 15 per day Angling License Required District 18a Closed
Spiny Lobster	ALL													No Sale of Meat. None under 10½ or over 16 inches See Note 23
GRUNION	ALL													

No Sale
No Spearing for other restrictions
See Notes
12-15-16-20
21-22-27-28
30-32
On this Card

No Black Bass under 9 in.
No sale
Hook and line only

Hook and line only
No sale

SALMON, See Note A. **STURGEON, No Open Season (possession prohibited).**

NOTES

IT IS ALWAYS UNLAWFUL

1. To hunt, kill, possess wild birds or mammals, to possess firearms, except under written permit from the Commission, in Dists. 1a, 1b, 1c, 1d, 1e, 1f, 1g, 1h, 1i, 1j, 1k, 1m, 1n, 1o, 1p, 1q, 1r, 1s, 1t, 2a, 2b, 3a, 3b, 3c, 3d, 3e, 3f, 3g, 3h, 4a, 4b, 4c, 4d, 4e, 4f, 4g, or General Grant Refuge, or Mt. Tamalpais Game Refuge, including Richardson Bay, or San Francisco Refuge, or Silver Lake Refuge (water fowl may be killed in 4a and 4e), or to hunt quail in Bolinas Quail Refuge, or to hunt or discharge firearms in Huntington Lake Refuge, San Leandro Bay Refuge, or Monterey Peninsula Refuge.

2. To hunt birds or mammals excepting predators without a hunting license. To hunt in areas closed by proclamation.

3. To possess any bird net or to net, trap or to hold protected game or birds of any kind, their nests or eggs except under written permit from the Commission.

4. To take more than 4 geese per day, 8 per week of all varieties, and 12 Canada geese and black sea brant. To take more than 25 mud hens per day, 50 per week. To have more than 1 daily bag limit of geese and mud hens in possession by 1 person in 1 day.

5. To take or kill nongame birds, except blue jay, butcher bird, English sparrow, sharp-shinned, Cooper or duck hawk, great horned owl, linnet, crow, black-billed magpie, white pelican, shag, and in Dists. 1, 2, 3, 4 and 4½, blackbirds.

6. To hunt deer without deer tag license. To fail to attach to horns of deer immediately on killing, properly filled out deer tag or at same time to send duplicate tag to Division. To carry deer into closed district without having deer tag countersigned, or to have untagged deer in possession. To fail to retain in possession during open season and for 10 days after, skin and portion of head bearing horns of deer killed and to produce upon demand. To use more than 1 dog to hunter in hunting deer or to allow dogs to run deer in closed season, or to possess doe or fawn skins, or deer skins not bearing evidence of sex.

7. To trap for profit without first procuring a trapping license bear, ring-tailed cat, coon, pine marten, skunk, fisher, wolverine, mink, river otter, fox or muskrat, or to kill same during closed season, except when destroying property. To interfere with traps of licensed trappers. To use saw tooth or spike-jawed traps for taking fur bearers.

8. To use any animal other than dog to stalk wild birds.

9. To shoot game from power boat, sailboat, auto, airplane, or to hunt waterfowl from scull boat in Dists. 8, 9, except on Wed. and Sun., or at any time in Dist. 12 or Napa River south of Edgerly Island, and in Mare Island Straits from the Napa River to Carquinez Strait, or to use shotgun larger than 10 gauge, or to possess an extension automatic or cane gun. To have in possession any device capable of or to be used in silencing the report of any firearm.

10. To shoot resident game between ½ hour after sunset and ½ hour before sunrise, or migratory game between sunset and ½ hour before sunrise. To use a spotlight in hunting game.

11. To drive game birds by means of auto, airplane, or power boat over shooters.

12. To hold game or fish longer than 5 days after close of season; venison 15 days.

13. To sell wild game, except cottontail and brush rabbits.

14. To make a false statement in applying for license. To fail to show license upon demand to any officer.

15. To take game or fish from one district to another when season is not open in both. (Special law for deer, trout and black bass.) Trout legally taken may be transported from open district into closed district by the consignor making an affidavit in duplicate setting forth his name, address, number of angling license and name and address of consignee. Original must be attached to shipment; copy left on file with officer before whom sworn. Trout may be shipped into closed district when accompanied by written statement to effect that trout were legal, signed by shipper, countersigned by agent to whom offered for shipment. Black bass legally taken may be transported from open district into closed district.

16. To ship wild birds, mammals, or fish except smoked or dried fish other than trout by parcels post, or in concealed packages or without a tag bearing name and address of consignee and consignor and contents, or to ship game out of State.

17. To operate a commercial hunting club without license.

18. To place obstructions in streams in Dists. 1, 1½, 2, 2½, 3½, 3, 4, 4½, 23 and 26 that will stop or impede fish.

19. To sell striped bass taken with hook and line; to transport or carry striped bass out of State. To ship striped bass less than 30 in. in length or more than 10 lbs. in weight. To possess more than 5 shad per day between June 1 and Feb. 14.

20. To take trout other than with rod and line held in hand or with lure with more than 2 attractor blades or more than one hook. To take trout except by angling in such manner as to cause trout to voluntarily take hook in its mouth.

21. To have in possession any fish spear or gaff (except landing gaff) within 300 feet of any lake or stream when unlawful to spear salmon.

22. To take trout in any lake within 300 feet of mouth of any stream from Oct. 31 to Aug. 1, or in that portion of any stream flowing into any lake in Dist. 23 within 2 miles from its mouth, upstream, from Oct. 31 to Aug. 1. To take golden trout in Cottonwood Lakes group, including South Fork Cottonwood Lakes group and ½ mile of stream below the lower lake in each of said groups, except from July 1 to Oct. 31.

23. To bring to shore crabs or lobsters in such condition that size can not be taken or to ship or carry crabs out of Dists. 1½, 2½, 5, 6, 7, 8 or 9. To sell any crabs taken in Eel River or tributaries or to possess more than 10 crabs taken there or to take any between ½ hour after sunset and ½ hour before sunrise.

24. To take or possess in Dist. 3 salt water eels of less than 12 in. or more than 15 per day.

25. To take or possess cockles less than 1½ in. in diameter, or to take or possess more than 15 (Dists. 2 and 10) Washington clams or more than 10 horse clams or more than 30 razor or jackknife clams per day, or in Dists. 18, 19, 21 more than 15 lbs. of mussels per day. To take or possess any Pismo clams in Dist. 18 between ½ hour after sunset and ½ hour before sunrise, or to possess any clam digging implement in that district. To possess any clam digging implement in any clam preserve.

26. To take red abalones less than 7 in., in greatest diameter; green, 6½; pink, 6; black, 5; to dry abalones; to dive for abalones in Dists. 7, 15, 16, 17, 19, 20 and 20a; to take more than 10 per day or 20 per week in Dists. 7, 15, 16, 17, 19, 20 and 20a. To take more than 10 per day from shore in Dists. 7, 10 and 18; to take more than 10 black abalones per day in Dists. 15, 16, 17, 18, 19, 20, 20a, 21. To possess more than 10 per day in Dist. 2.

27. To fish for game fish without having an angling license.

28. To take game fish between 1 hour after sunset and 1 hour before sunrise in Dists. 1, 1a, 1d, 2, 2½, 2a, 3, 4, 4a, 4b, 23, 25. To take striped bass by hook and line between sunset and sunrise.

29. To fish with nets except in commercial districts or to injure any legal net.

30. To fish through ice for any fish or to take fish in Dist. 14.

31. To place, cause to be placed, or discharge into any waters substances deleterious to fish or plant life.

32. To fish within 250 ft. of fishway or 150 ft. of upper side of fish screen, or lower side of dam, or to take fish except salmon within ½ mile of either side of spawning station, or any lake within ½ mile of spawning station when station is in operation.

33. To kill, injure or capture Cal. sea lions in Dists. 19, 20, 20a.

34. To take invertebrates or marine plants in Hopkins Marine Reserve (Monterey Co.) or in that area between the west line of the property of the Scripps Institute and a line 1,000 feet west of low tide line (San Diego Co.).

35. To take or possess less than 5 white sea bass from May 1 to June 30, or to take at any one time more than 5 under 28 in.

36. To take more than 30 lbs. of halibut under 4 lbs. each, or to take more than 5 barracuda less than 3 lbs. each.

37. To take frogs less than 4 in. in length measured from tip of nose to posterior end of body between hind legs, or to take or possess more than 24 frogs per day or 48 frogs per week.

NOTE A—SALMON: Salmon can not be taken on spawning beds, or within 150 cubic ft. of fishway or fishing station, or 3 miles north and south of mouth of Klamath River. All salmon boats must have landing net, and no chinook less than 22 in. silver less than 24 in. or roe be taken in coho and Humboldt Bay Dists. Undersized salmon can not be cuffed or clubbed, or brought ashore in such condition that size can not be determined. Salmon may be taken with hook and line in any district when trout season for said district is open.

In Dist. 1, salmon may be taken with hook and line or spear between May 29 and Oct. 31, except (a) in Feather River from its mouth to mouth of the Yuba; (b) in American River from its mouth to Paiz Oaks bridge. In Dist. 2, (c) in Russian, Napa and Navarro rivers; (d) in Eel River and (e) in sidewater in Dists. 2, 3 and 15, with hook and line from May 1 to last day of Feb., bag limit 3 per day. In Feather River between mouth of Yuba and Thermalito bridge, with hook and line between May 1 and Dec. 31, bag limit 2 per day. In San Joaquin River, from mouth to Mendota dam, with hook and line from April 1 to Dec. 31. In Dist. 1a, with hook and line from May 29 to Dec. 31; with spear from Aug. 1 to Oct. 31, bag limit 2 per day. In Dists. 2, 2½, 3, 4, 4a, 4b, with hook and line from May 1 to Feb. last; with spear from Nov. 1 to Feb. last, bag limit 2 per day. In Dist. 3, with hook and line from May 1 to Oct. 31, bag limit 2 per day. In Klamath River Dist. above sidewater, with hook and line from May 1 to Dec. 31; with spear from Aug. 1 to Oct. 31, bag limit 2 per day. In Klamath River Dist. in sidewater, with hook and line from May 29 to Dec. 31. Bag limit is 5 per day from May 29 to Sept. 5, and 2 per day from Sept. 6 to Dec. 31, not more than 1 daily bag limit in possession. In Dists. 6, 7, 8, 9 with hook and line from April 1 to Sept. 15, no bag limit. In Dist. 10, 11, with hook and line from May 1 to Aug. 30, no bag limit. In Dists. 12, 12B, 12C, 13, with hook and line at any time, no bag limit. In Dist. 14, with hook and line from May 1 to Feb. last, bag limit 2 per day. In Dists. 15, 16, 17, 18, with hook and line from Mar. 1 to July 15.

LICENSES MUST BE SHOWN UPON DEMAND

Districts 1a, 1b, 1c, 1d, 1e, 1f, 1g, 1h, 1i, 1j, 1k, 1m, 1n, 1o, 1p, 1q, 1r, 1s, 1t, 2a, 2b, 3a, 3b, 3c, 3d, 3e, 3f, 3g, 3h, 4a, 4b, 4c, 4d, 4e, 4f, 4g, are Game Refuges. Hunting prohibited. Angling in accordance with law relating to main districts in which refuge is located.

Districts 5, 6, 7, 8, 9, 10, 11, 12, 12a, 12b, 12c, 13, 16, 17, 18, 19, 19a, 20, 20a, 21, 22, are Commercial Fishing Districts. Hunting and angling in accordance with law relating to main district in which small district is located.

District 14 is a Fish Reservation. All fishing prohibited.

District 2½ includes those townships in Mendocino County bordering on the Pacific Ocean (except 15 and 16 W., 11 N.) and townships 13, 14, 15, 16, 17 and 18 N., R. 16 W.

District 2½. Those parts of Mendocino, Lake and Colusa counties lying east of the Redwood Highway and north of the Lake Tahoe-Ukiah Highway, and all of Glenn County.

District 23. The water shed of Lake Tahoe and Truckee River, Rubicon and Little Rubicon above confluence. Water shed of American River and Silver Creek above confluence. Includes waters in water shed of Cosumnes above mother lode highway bridge, waters of South Fork American River between Strahl Bar Bridge and mouth of Silver Creek, the waters of the Carson, West Carson and all tributaries, Twin Lakes, Silver, Twin, Blue, Meadow, Wood, Winnemucca, Scott, Burnside Lake and all tributary streams and the drainage area of Webber Creek above mother lode highway bridge.

Sporting fishing licenses are required for the taking of the following fish and mollusks only: trout, yellow tail, marlin, broad bill swordfish, sailfish or black sea bass, albacore, barracuda, tunas, surf bass, California whitefish (also known as rainbow and surf fish), yellow bass, crappie, sunfish (other than goldfish), striped bass, black bass, perch, steelhead trout, Pismo clams, abalones, and all varieties of sunfishes.

LICENSE PROVISIONS

HUNTING

License year July 1 to June 30

Residents, age 18	$1.00
Resident citizens	2.00
Nonresident citizens	10.00
Declarant aliens	10.00
Other aliens	25.00

ANGLING

License year January 1 to December 31

Resident citizens	$2.00
Nonresident citizens	5.00
Aliens	5.00
Under 18 no license required	

TRAPPING

License year July 1 to June 30

Citizens	$1.00
Aliens	2.00
Under 18 no license required	

DEER TAG

License year January 1 to December 31

Everyone (2 tags)	$1.00

COMMERCIAL HUNTING CLUBS

License year July 1 to June 30

Citizens	$25.00
Aliens	100.00
Operators, citizens	5.00
Operators, aliens	25.00

For Laws in Full See Fish and Game Code

For Commercial Fish Laws See Commercial Abstract

For Information Regarding Fish or Game Write to the Division of Fish and Game